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U. S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, DC 20555-0001

Serial No. 13-226G
LIC/JG/R0
Docket No. 50-305
License No. DPR-43

DOMINION ENERGY KEWAUNEE, INC.
KEWAUNEE POWER STATION
SUPPLEMENT 3: LICENSE AMENDMENT REQUEST 256, PERMANENTLY
DEFUELED LICENSE AND TECHNICAL SPECIFICATIONS

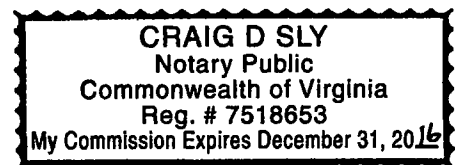
By application dated May 29, 2013 (Reference 1), Dominion Energy Kewaunee, Inc. (DEK), requested an amendment to Renewed Facility Operating License Number DPR-43 (Operating License) for Kewaunee Power Station (KPS). The proposed amendment would revise the KPS Operating License and Technical Specifications (TS) to Permanently Defueled Technical Specifications (PDTS), consistent with the permanently defueled status of the plant. The application was supplemented by letters dated October 15, 2013 (Reference 2) and January 7, 2014 (Reference 3).

In the KPS Post-Shutdown Decommissioning Activities Report (PSDAR) submitted on February 26, 2013, DEK indicated that all irradiated fuel would be transferred to dry storage in the independent spent fuel storage installation (ISFSI) by the end of 2020. However, DEK recently outsourced activities associated with the transfer of spent fuel remaining in the spent fuel pool to the ISFSI and compressed the schedule for completing the transfer of all spent fuel to the ISFSI. Under the new schedule, DEK expects to have all spent fuel transferred to the ISFSI by the end of 2016.

As recently discussed with NRC staff (Reference 4), scheduled transfers of spent fuel from the spent fuel pool to dry casks are predicated on deletion of certain TS sections as proposed in our original PDTS submittal (Reference 1). If not deleted, these TS sections would require restoring operability of certain equipment during spent fuel movement that is no longer needed for accident mitigation. Under the new offload schedule, DEK plans to begin spent fuel transfers to the ISFSI by July 1, 2014. To support these scheduled spent fuel transfers, DEK requests expedited deletion of these specific TS sections in advance of approval of Reference 1.

Additionally, the NRC staff requested changes (Reference 5) to certain portions of the proposed Technical Specifications regarding TS 5.2.2, "Facility Staff," that are associated with spent fuel movement. Accordingly, proposed changes addressing this concern are included in this supplement as well.

ADD
WLR



References:

1. Letter from Eugene S. Grecheck (DEK) to NRC Document Control Desk, "License Amendment Request 256, Permanently Defueled License and Technical Specifications," dated May 29, 2013 (ADAMS Accession No. ML13156A037)
2. Letter from Mark D. Sartain (DEK) to NRC Document Control Desk, "Supplement 1 and Response to Request for Additional Information Regarding License Amendment Request 256, Permanently Defueled License and Technical Specifications," dated October 15, 2013 (ADAMS Accession No. ML13294A091)
3. Letter from Mark D. Sartain (DEK) to NRC Document Control Desk, "Supplement 2: License Amendment Request 256, Permanently Defueled License and Technical Specifications," dated January 7, 2014
4. Teleconference between NRC staff and DEK representatives, regarding expedited approval of certain portions of Kewaunee Power Station Permanently Defueled Technical Specifications, on January 24, 2014
5. Email from Mr. William Huffman (NRC) to Jack Gadzala (DEK) et al, "Draft RAI on Kewaunee Permanently Defueled Technical Specifications," dated March 6, 2014

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ATTACHMENT 1

**SUPPLEMENT 3:
LICENSE AMENDMENT REQUEST 256
PERMANENTLY DEFUELED LICENSE AND TECHNICAL SPECIFICATIONS**

DISCUSSION OF CHANGE AND TECHNICAL ANALYSIS

**KEWAUNEE POWER STATION
DOMINION ENERGY KEWAUNEE, INC.**

**SUPPLEMENT 3
LICENSE AMENDMENT REQUEST 256
PERMANENTLY DEFUELED LICENSE AND TECHNICAL SPECIFICATIONS**

DISCUSSION OF CHANGE AND TECHNICAL ANALYSIS

1.0 DESCRIPTION

By application dated May 29, 2013 (Reference 1), Dominion Energy Kewaunee, Inc. (DEK), requested an amendment to Renewed Facility Operating License Number DPR-43 (Operating License) for Kewaunee Power Station (KPS). The proposed amendment would revise the KPS Operating License and Technical Specifications (TS) to Permanently Defueled Technical Specifications (PDTS), consistent with the permanently defueled status of the plant. The application was supplemented by letters dated October 15, 2013 (Reference 2) and January 7, 2014 (Reference 3).

In the KPS Post-Shutdown Decommissioning Activities Report (PSDAR) submitted on February 26, 2013, DEK indicated that all irradiated fuel would be transferred to dry storage in the ISFSI by the end of 2020. However, DEK recently outsourced activities associated with the transfer of spent fuel remaining in the spent fuel pool to the independent spent fuel storage installation (ISFSI) and compressed the schedule for completing the transfer of all spent fuel to the ISFSI. Under the new schedule, DEK expects to have all spent fuel transferred to the ISFSI by the end of 2016.

As recently discussed with NRC staff (Reference 4), scheduled transfers of spent fuel from the spent fuel pool to dry casks are predicated on deletion of certain TS sections as proposed in our original PDTS submittal (Reference 1). If not deleted, these TS sections would require restoring operability of certain equipment during spent fuel movement that is no longer needed for accident mitigation. Under the new offload schedule, DEK plans to begin spent fuel transfers to the ISFSI by July 1, 2014. To support these scheduled spent fuel transfers, DEK requests expedited deletion of these specific TS sections in advance of approval of Reference 1.

Additionally, the NRC staff requested changes (Reference 5) to certain portions of the proposed Technical Specifications regarding TS 5.2.2, "Facility Staff," that are associated with spent fuel movement. The staff's request stated the following:

Proposed TS 5.2.2 does not require the radiation protection staff to be onsite during fuel handling operations or during movements of loads over storage racks containing fuel. The NRC staff does not find this proposed change to be acceptable for a defueled reactor plant, as it is currently proposed. Please provide a requirement that is consistent with both draft NUREG-1625 and Millstone Unit 1 TSs or provide a technical basis for not maintaining consistency

with Millstone Unit 1 TSs, since you stated that you would maintain consistency with Millstone Unit 1 in your response dated October 15, 2013.

This supplement to the proposed amendment lists the specific TS sections (that are no longer needed) for which expedited deletion is being requested. This supplement to the proposed amendment also addresses the staff's requested changes to TS 5.2.2. The conclusions of the no significant hazards consideration and the environmental considerations contained in Reference 1 are not affected by, and remain applicable to, this supplement.

2.0 PROPOSED CHANGE

TS Sections Requested for Deletion on an Expedited Basis

The original amendment request (Reference 1) proposed deletions of certain Technical Specifications (TS) sections that were no longer needed for the permanently defueled condition. The TS sections shown below are a subset of the TS sections that were originally proposed for deletion. The TS sections listed below are being proposed for deletion separately, in advance of approval of the originally proposed amendment request.

A mark-up of the TS Table of Contents, reflecting the proposed deletions, is provided in Attachment 2.

TS Being Deleted (Expedited Request)	
3.3 INSTRUMENTATION	
3.3.5	Loss of Offsite Power (LOOP) Diesel Generator (DG) Start Instrumentation
3.3.7	Control Room Post Accident Recirculation (CRPAR) System Actuation Instrumentation
3.7 PLANT SYSTEMS	
3.7.10	Control Room Post Accident Recirculation (CRPAR) System
3.7.11	Control Room Air Conditioning (CRAC) Alternate Cooling System
3.8 ELECTRICAL POWER SYSTEMS	
3.8.2	AC Sources - Shutdown
3.8.3	Diesel Fuel Oil and Lube Oil
3.8.5	DC Sources - Shutdown
3.8.6	Battery Parameters
3.8.8	Inverters - Shutdown
3.8.10	Distribution Systems - Shutdown

Technical Specifications Section 5.2.2, "Facility Staff"

The NRC staff requested changes (Reference 5) to certain portions of the proposed Technical Specifications. Specifically, the staff requested that DEK provide a requirement for radiation protection staff to be onsite during fuel handling operations or movements of loads over storage racks containing fuel.

In response to the staff's comments, DEK is revising the originally proposed amendment. A specific formal TS for radiation protection staff to be onsite during fuel handling operations or movements of loads over storage racks containing fuel is being added to the TS.

Attachment 2 contains the marked-up TS page affected by this revision. The conclusions of the no significant hazards consideration and the environmental considerations contained in Reference 1 are not affected by, and remain applicable to, this revision.

3.0 TECHNICAL ANALYSIS

TS Sections Requested for Deletion on an Expedited Basis

No new changes are being proposed in this supplemental request. DEK is requesting expedited approval to delete a specific subset of Technical Specifications (TS) that were proposed for deletion in the original amendment request. The TS proposed for deletion on an expedited basis are those that would unnecessarily require restoring operability of certain equipment during spent fuel movement that is no longer needed for accident mitigation in the spent fuel pool and thereby negatively affect the current schedule for transferring fuel to the ISFSI. Therefore, DEK is requesting NRC approve deletion of the above listed TS sections separately and in advance of the originally proposed change. The technical justification for deleting these TS remains unchanged from that provided in LAR 256 (Reference 1).

In general, because 10 CFR 50.82(a)(2) prohibits operation of the plant or placing fuel in the reactor vessel, the above listed TS are no longer needed to assure the appropriate functional capability of their associated systems, structures, or components (SSCs) for safe operation of the facility. The only remaining Applicability requirement of these TS is "during movement of irradiated fuel assemblies."

The design basis accidents and transients analyzed in USAR Chapter 14 are no longer applicable in the permanently defueled condition, with the exception of the fuel handling accident (FHA) in the auxiliary building (as discussed in Section 5.2, "Applicable Regulatory Requirements/Criteria," of Reference 1). A description of the FHA analysis for the permanently defueled condition is provided in Section 2.0, "Proposed Change," of Reference 1. The FHA analysis shows that the dose consequences are acceptable

without relying on any SSCs to remain functional during and following the event (based on compliance with the spent fuel pool water level requirements of TS 3.7.13).

TS 5.2.2, "Facility Staff"

A new, more restrictive change is being proposed in this request. A new requirement is being added for an individual qualified in radiation protection procedures to be onsite during fuel handling operations or movements of loads over storage racks containing fuel. This requirement is consistent with existing TS 5.2.2.d, approved by the NRC for Millstone Unit 1 and consistent with draft NUREG-1625, "Proposed Standard Technical Specifications for Permanently Defueled Westinghouse Plants."

A load is defined as a mass or weight suspended from the crane's hook (e.g., the lifting assembly itself would not be considered a load).

For administrative convenience, this new requirement will be added as TS 5.2.2.e and replace the previous TS 5.2.2.e, whose deletion is described in LAR 256 (Reference 1). This maintains sequential numbering of the specifications in this section.

DEK believes that it is prudent to have an individual qualified in radiation protection procedures on site during fuel handling operations or movements of loads over storage racks containing fuel. Accordingly, existing KPS procedures require that radiation protection staff be present for various activities that may affect radiological conditions, such as movement of irradiated fuel. This new TS requirement will provide additional administrative controls for ensuring that an individual qualified in radiation protection procedures on site during fuel handling operations or movements of loads over storage racks containing fuel.

4.0 SUMMARY

Kewaunee Power Station is a permanently defueled facility that has been shutdown for a sufficiently long period of time such that the systems, structures, and components (SSCs) subject to the above listed Technical Specifications (TS) sections are no longer required to address a design basis accident or transient analyses. Therefore, 10 CFR 50.36 no longer requires these SSCs to be included within TS.

Deletion of the above listed TS sections is needed allow transfer of irradiated fuel from the spent fuel pool to the ISFSI in accordance with the schedule that has been established and without unnecessary expenditures of decommissioning trust funds for support of SSCs that are no longer significant to public health and safety.

The revision being proposed in this supplement to TS 5.2.2, "Facility Staff," ensures appropriate requirements for administrative controls in this area.

5.0 REGULATORY ANALYSIS

5.1 No Significant Hazards Consideration

The conclusions of the no significant hazards consideration contained in Reference 1 are not affected by, and remain applicable to, this proposed change.

5.2 Applicable Regulatory Requirements/Criteria

The applicable regulatory requirements/criteria contained in Reference 1 are not affected by, and remain applicable to, this proposed change.

6.0 ENVIRONMENTAL CONSIDERATION

The conclusions of the environmental considerations contained in Reference 1 are not affected by, and remain applicable to, this proposed change.

7.0 REFERENCES

1. Letter from Eugene S. Grecheck (DEK) to NRC Document Control Desk, "License Amendment Request 256, Permanently Defueled License and Technical Specifications," dated May 29, 2013 (ADAMS Accession No. ML13156A037)
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ATTACHMENT 2

**SUPPLEMENT 3:
LICENSE AMENDMENT REQUEST 256
PERMANENTLY DEFUELED LICENSE AND TECHNICAL SPECIFICATIONS**

**MARKED UP TECHNICAL SPECIFICATIONS PAGES
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**KEWAUNEE POWER STATION
DOMINION ENERGY KEWAUNEE, INC.**

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5.2 Organization

NOTE: Changes to TS 5.2.2.c and d, along with deletion of the original TS 5.2.2.e are justified separately in LAR 256.

5.2.2 Unit/Facility Staff (continued)

- c. ~~A radiation technologist shall be on site when fuel is in the reactor. The position may be vacant for not more than 2 hours, except in severe weather conditions, in order to provide for unexpected absence, provided immediate action is taken to fill the required position. All fuel handling operations shall be directly supervised by a qualified individual.~~
- d. ~~The operations shift manager or assistant operations manager shall hold be a CERTIFIED FUEL HANDLER Senior Operator license.~~
- e. ~~When the unit is in MODE 1, 2, 3, or 4 an individual shall provide advisory technical support to the unit operations shift crew in the areas of thermal hydraulics, reactor engineering, and plant analysis with regard to the safe operation of the unit. This individual shall meet the qualifications specified by the Commission Policy Statement on Engineering Expertise on Shift. An individual qualified in radiation protection procedures shall be onsite during fuel handling operations or movements of loads over storage racks containing fuel.~~